

CLAIMS

1 A recording apparatus adapted for recording first definition data in accordance with a first format, and for recording data having a definition different from the first definition data (hereinafter referred to as second definition data) in accordance with a second format different from the first format onto a magnetic tape in which plural tracks each consisting of first sector, second sector and third sector are formed in conformity with the first format,

the recording apparatus comprising:

compressed data processing means for performing compression processing of inputted second definition data to generate compressed data;

system data generating means for generating system data including at least time code;

time management information generating means for detecting time information from the inputted second definition data to generate time management information on the basis of the time information;

extended track number generating means for generating extended track number on the basis of the time management information;

memory means for storing the compressed data and the system data;

read-out means for reading out compressed data and system data which are stored in the memory means;

control means for controlling the read-out means so as to read out, at a predetermined timing, the compressed data and the system data which are stored in the memory means on the basis of the extended track number; and

recording means for recording, into the second sector, the compressed data which has been read out by the read-out means, and for recording, into the third sector, along with extended track number, the system data which has been read out by the read-out means,

wherein the recording means records, at a predetermined position of the first sector, format information indicating that compressed data is recorded in the second sector in accordance with the second format, and records, at a predetermined position of the third sector (position in which format information indicating the first format is recorded in the case where data is recorded in accordance with the first format (position from the leading address of the first sector)), format information indicating the first format.

2 The recording apparatus as set forth in claim 1,

wherein the compression data processing means performs compression processing of inputted second definition data by the MP@HL system or the MP@H-14 system.

3 A recording method of recording first definition data in accordance

with a first format, and of recording data having a definition different from the first definition data (hereinafter referred to as second definition data) in accordance with a second format different from the first format onto a magnetic tape in which plural tracks each consisting of first sector, second sector and third sector are formed in conformity with the first format,

the recording method including:

a compressed data generation step of performing compression processing of inputted second definition data to generate compressed data;

a system data generation step of generating system data including at least time code;

a time management information generation step of detecting time information from inputted second definition data to generate time management information on the basis of the time information;

an extended track number generation step of generating an extended track number on the basis of the time management information;

a memory step of storing the compressed data and the system data into a memory unit;

a read-out step of reading out, at a predetermined timing, compressed data and system data from the memory unit on the basis of the extended track number; and

a recording step of recording, into the second sector, compressed data

which has been read out by the read-out step, and of recording, into the third sector, along with extended track number, the system data which has been read out by the read-out step,

wherein the recording step comprising: recording, at a predetermined position of the first sector, format information indicating that compressed data is recorded in the second sector in accordance with the second format, and recording, at a predetermined position of the third sector (position in which format information indicating first format is recorded in the case where data is recorded in accordance with the first format (position from the leading address of the first sector)), format information indicating the first format.

4 A recording apparatus adapted for recording first definition data in accordance with a first format, and for recording data having a definition different from the first definition data (hereinafter referred to as second definition data) in accordance with a second format different from the first format onto a magnetic tape in which plural tracks each consisting of first sector, second sector and third sector are formed in conformity with the first format,

the recording apparatus comprising:

a compressed data processing unit for performing compression processing of inputted second definition data to generate compressed data;

a system data generating unit for generating system data including at

least time code;

a time management information generating unit for detecting time information from the inputted second definition data to generate time management information on the basis of the time information;

an extended track number generating unit for generating extended track number on the basis of the time management information;

a memory unit for storing the compressed data and the system data;

a read-out unit for reading out compressed data and system data which are stored in the memory unit;

a control unit for controlling the read-out unit so as to read out, at a predetermined timing, the compressed data and the system data which are stored in the memory unit on the basis of the extended track number; and

a recording unit for recording, into the second sector, the compressed data which has been read out by the read-out unit, and for recording, into the third sector, along with extended track number, the system data which has been read out by the read-out unit,

wherein the recording unit records, at a predetermined position of the first sector, format information indicating that compressed data is recorded in the second sector in accordance with the second format, and records, at a predetermined position of the third sector (position in which format information indicating the first format is recorded in the case where data is

recorded in accordance with the first format (position from leading address of the first sector)), format information indicating the first format.

- 5 The recording apparatus as set forth in claim 4,
 wherein the compressed data processing unit performs compression processing of inputted second definition data by the MP@HL system or the MP@H-14 system.